AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A manufacturing quality information database stored in a computer-readable medium and usable for tracking quality information relating to a manufacturing process, comprising:

a symptom data entity storing symptoms, which are observable states indicative of a defect, of manufacturing process defects;

a defect data entity storing defects of the manufacturing process; and

an action data entity storing repair actions for remedying related defects,

said defect data entity being associated with said symptom data entity; and

said action data entity being associated with said defect data entity.

2. (Original) The manufacturing quality information database according to claim 1,

wherein said manufacturing quality information database tracks a plurality of manufacturing processes,

the manufacturing quality information database further comprising:

a process data entity storing identities of the manufacturing processes,

said symptom data entity, said defect data entity, and said action data entity being associated with said process data entity.

3. (Original) The manufacturing quality information database according to claim 1,

wherein said manufacturing quality information database tracks a plurality of manufactured items,

the manufacturing quality information database further comprising:

an item data entity storing identities of manufactured items;

said symptom data entity, said defect data entity, and said action data entity being associated with said item data entity.

4. (Original) The manufacturing quality information database according to claim 1, further comprising:

a symptom category data entity for storing symptom categories of manufacturing defects;

said symptom data entity being associated with said symptom category data entity.

5. (Original) The manufacturing quality information database according to claim 4,

wherein said manufacturing quality information database tracks a plurality of manufacturing processes,

the manufacturing quality information database further comprising:

a process data entity storing identities of the manufacturing processes; and

a process/symptom frequency data entity observing a relationship frequency between the symptom categories and the manufacturing process identities.

6. (Original) The manufacturing quality information database according to claim 1, further comprising:

a defect category data entity for storing defect categories of the manufacturing process;

said defect data entity being associated with said defect category data entity.

7. (Original) The manufacturing quality information database according to claim 6, further comprising:

a symptom/defect frequency data entity observing a relationship frequency between the symptom categories and the defect categories.

8. (Original) The manufacturing quality information database according to claim 1, further comprising:

an action category data entity storing action categories;

said action data entity being associated with said action category data entity.

9. (Original) The manufacturing quality information database according to claim 8, further comprising:

a defect/action frequency data entity observing a relationship frequency between the defect categories and the action categories.

10. (Original) The manufacturing quality information database according to claim 1,

wherein said manufacturing quality information database tracks a plurality of manufacturing processes,

the manufacturing quality information database further comprising:

a process data entity storing identities of the manufacturing processes;

a symptom category data entity storing symptom categories of manufacturing defects;

a defect category data entity storing defect categories of the manufacturing process; and

a process/symptom/defect frequency data entity observing a relationship frequency between the manufacturing process identities, the symptom categories and the defect categories.

11. (Original) The manufacturing quality information database according to claim 1,

wherein said manufacturing quality information database tracks a plurality of manufacturing processes,

the manufacturing quality information database further comprising:

a process data entity storing identities of the manufacturing processes;

a symptom category data entity storing symptom categories of manufacturing defects;

a defect category data entity storing defect categories of the manufacturing process;

an action category data entity storing action categories; and

a process/symptom/defect/action frequency data entity observing a relationship frequency between the manufacturing process identities, the symptom categories, the defect categories, and the action categories.

12. (Original) The manufacturing quality information database according to claim 1, further comprising:

a symptom category data entity storing symptom categories of manufacturing defects;

a defect category data entity storing defect categories of the manufacturing process;

said symptom data entity being associated with said symptom category data entity;

said defect data entity being associated with said defect category data entity; and

said defect category entity being associated with said symptom category data entity.

13. (Original) The manufacturing quality information database according to claim 1, further comprising:

a defect category data entity storing defect categories of the manufacturing process;

an action category data entity storing action categories;

said defect data entity being associated with said defect category data entity;

said action data entity being associated with said action category data entity; and

said action category data entity being associated with said defect category data entity.

14. (Currently Amended) A method of using a manufacturing quality information database for tracking quality information relating to a manufacturing process, comprising:

storing symptoms, which are observable states indicative of a defect, of manufacturing process defects in a symptom data entity;

storing defects of the manufacturing process in a defect data entity; and

storing repair actions for remedying related defects in an action data entity,

associating the defect data entity with the symptom data entity; and

associating the action data entity with the defect data entity.

15. (Original) The method of using a manufacturing quality information database according to claim 14, further comprising:

tracking a plurality of manufacturing processes with the manufacturing quality information database;

storing identities of the manufacturing processes in a process data entity; and

associating the symptom data entity, the defect data entity, and the action data entity with the process data entity.

16. (Original) The method of using a manufacturing quality information database according to claim 14, further comprising:

tracking a plurality of manufactured items with the manufacturing quality information database;

storing identities of manufactured items in an item data entity; and

associating the symptom data entity, the defect data entity, and the action data entity with the item data entity.

17. (Original) The method of using a manufacturing quality information database according to claim 14, further comprising:

storing symptom categories of manufacturing defects in a symptom category data entity; and

associating the symptom data entity with the symptom category data entity.

18. (Original) The method of using a manufacturing quality information database according to claim 17,

tracking a plurality of manufacturing processes with the manufacturing quality information database;

storing identities of the manufacturing processes in a process data entity;

observing a relationship frequency between the symptom categories and the manufacturing process; and

storing the relationship frequency in a process/symptom frequency data entity.

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19. (Original) The method of using manufacturing quality information database according to claim 14, further comprising:

storing defect categories of the manufacturing process in a defect category data entity; and

associating the defect data entity being with the defect category data entity.

20. (Original) The method of using a manufacturing quality information database according to claim 19, further comprising:

observing a relationship frequency between the symptom categories and the defect categories; and

storing the relationship frequency in a symptom/defect frequency data entity.

21. (Original) The method of using manufacturing quality information database according to claim 14, further comprising:

storing action categories in an action category data entity; and

associating the action data entity with the action category data entity.

22. (Original) The method of using a manufacturing quality information database according to claim 21, further comprising:

observing a relationship frequency between the defect categories and the action categories; and

storing the relationship frequency in a defect/action frequency data entity.

23. (Original) The method of using manufacturing quality information database according to claim 14, further comprising:

tracking a plurality of manufacturing processes with the manufacturing quality information database;

storing identities of the manufacturing processes in a process data entity;

storing symptom categories of manufacturing defects in a symptom category data entity;

storing defect categories of the manufacturing process in a defect category data entity;

observing a relationship frequency between the manufacturing process identities, the symptom categories and the defect categories; and

storing the relationship frequency in a process/symptom/defect frequency data entity.

24. (Original) The method of using a manufacturing quality information database according to claim 14,

tracking a plurality of manufacturing processes with the manufacturing

quality information database,

storing identities of the manufacturing processes in a process data

entity,

storing symptom categories of manufacturing defects in a symptom

category data entity;

storing defect categories of the manufacturing process in a defect

category data entity;

storing action categories in an action category data entity;

observing a relationship frequency between the manufacturing process

identities, the symptom categories, the defect categories, and the action

categories; and

storing the relationship frequency in a process/symptom/defect/action

frequency data entity.

25. (Original) The method of using a manufacturing quality information

database according to claim 14, further comprising:

storing symptom categories of manufacturing defects in a symptom

category data entity;

storing defect categories of the manufacturing process in a defect

category data entity;

associating the symptom data entity with the symptom category data entity;

associating the defect data entity with the defect category data entity; and

associating the defect category entity with the symptom category data entity.

26. (Original) The method of using a manufacturing quality information database according to claim 14, further comprising:

storing defect categories of the manufacturing process in a defect category data entity;

storing action categories in an action category data entity;

associating the defect data entity with the defect category data entity;

associating the action data entity with the action category data entity; and

associating the action category data entity with the defect category data entity.